

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all previous versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Original): A method of collecting a biological fluid comprising:
collecting a biological fluid by natural flow;
measuring a fluid flow rate of the biological fluid; and
pumping anticoagulant and/or preservation solution to the collected biological fluid at a solution flow rate;

wherein the solution flow rate is adjusted while collecting the biological fluid based upon the measured fluid flow rate to preserve a selected ratio between the collected biological fluid and the anticoagulant and/or preservation solution.

Claim 2 (Original): The method of Claim 1, further comprising:
collecting the biological fluid in a collection bag; and
pumping the anticoagulant and/or preservation solution to the collection bag;
wherein the solution flow rate is adjusted while collecting the biological fluid based upon the measured fluid flow rate to preserve a selected ratio in the collection bag between the collected biological fluid and the anticoagulant and/or preservation solution.

Claim 3 (Original): The method of Claim 1, wherein the biological fluid comprises blood.

Claim 4 (Original): The method of Claim 1, wherein measuring a fluid flow rate of the biological fluid comprises calculating the variation in weight of the fluid collected.

Claim 5 (Original): The method of Claim 1, wherein pumping comprises:
pumping using a peristaltic pump having a variable rotation speed; and
adjusting the variable rotation speed to obtain the appropriate solution flow rate.

Claim 6 (Withdrawn): A collection machine comprising:
a fluid flow measurement device operable to measure a biological fluid flow rate;

a pump operable at a variable rotation speed to pump an anticoagulant and/or preservation solution at a solution flow rate;
wherein the variable rotation speed of the pump is slaved to the biological fluid flow rate.

Claim 7 (Withdrawn): The collection machine of Claim 6, further comprising a measuring device operable to measure the weight of a biological fluid collected and further operable to calculate the biological fluid flow rate based upon weight measurements.

Claim 8 (Withdrawn): The collection machine of Claim 6, further comprising a peristaltic pump.

Claim 9 (Withdrawn): A bag system comprising:

- a biological fluid collection device;
- a collection bag in fluid communication with the fluid collection device;
- a solution bag containing anticoagulant and/or preservation solution in fluid communication with the collection bag;
- a collection machine having:
 - a fluid flow measurement device operable to measure a biological fluid flow rate to the collection bag; and
 - a pump operable at a variable rotation speed to pump an anticoagulant and/or preservation solution from the solution bag to the collection bag at a solution flow rate;
- wherein the variable rotation speed of the pump is slaved to the biological fluid flow rate;
- and
- wherein the solution flow rate is adjusted to maintain a selected ratio of biological fluid and anticoagulant and/or preservation solution in the collection bag.

Claim 10 (Withdrawn): The system of Claim 9, wherein measurement of pressure within the system is not required to maintain the selected ratio of fluid and solution.

Claim 11 (Withdrawn): The system of Claim 9, further comprising a first tube operable to provide fluid communication between the collection device and the collection bag.

Claim 12 (Withdrawn): The system of Claim 11, further comprising a second tube operable to provide fluid communication between the solution bag and the collection bag.

Claim 13 (Withdrawn): The system of Claim 12, further comprising the a circuit opener disposed on the second tube near a connection between the second tube and the solution bag.

Claim 14 (Withdrawn): The system of Claim 12, further comprising a connector operable to connect the first tube and the second tube.

Claim 15 (Withdrawn): The system of Claim 12, wherein the first tube is connected to the collection device and the collection bag, and wherein the first tube has a length of at least 15 cm between the connection to the collection device and the connection to the collection bag.

Claim 16 (Withdrawn): The system of Claim 15, wherein the first tube has a length of at least 25 cm between the connection to the collection device and the connection to the collection bag.

Claim 17 (Withdrawn): The system of Claim 12, wherein the second tube is compressed by the pump in a compression region, and wherein the compression region has a hardness less than that of the first tube.